

## REMARKS

### STATUS OF THE APPLICATION

The instant application was filed on June 20, 2003 and contained claims 1-32. In response to a previous Office Action, Applicants canceled claims 30-32. In the most recent Office Action, claims 1-29 were rejected. In view of the the discussion presented herein below, Applicant submits claims 1-29 are patentable over the cited prior art and the instant application is in condition for allowance. An early notification of such allowance is therefore earnestly solicited.

### THE OFFICE ACTION

The Office has rejected claims 1-29 under 35 U.S.C. 103(a) as being unpatentable over JP 02-182433 in view of JP 08-221812 and either of U.S. Patent numbers 4,244,683 or 3,882,207.

### DISCUSSION

#### THE REJECTION UNDER 35 U.S.C. 103(a)

The Office has rejected claims 1-32 under 35 U.S.C. 103(a) as being unpatentable over JP 02-182433 in view of JP 08-221812 and either of U.S. Patent numbers 4,244,683 or 3,882,207.

The Office suggests that the Japanese KoKai 08-221812 ('812) teaches the use of a punch when embossing a web of substrate material to melt form an optical disc pattern on at least one surface of the web. The Office indicates that punch member 80 is used to make a hole in the web of substrate material.

Applicants contend that a thorough reading of the published Japanese KoKai '812 (via a machine translation provided by the JPO, a copy of which is attached hereto) indicates that the "punch" does not cut a hole in a web of substrate material as it is being melt formed, but rather pushes unsolidified polymer back into the supply lines before the the additional layer which is being molded onto a preformed polymer substrate is hardened by UV radiation. That is, the "punch" merely pushes liquid material back out of the mold and becomes a central portion of the mold as the pre-polymer is solidified. The '812 reference does not teach or suggest cutting a whole in the web of substrate material as it is being melt-formed from an initially solid web of substrate material, but merely provides a method for eliminating unwanted pre-polymer before the add-on layer is polymerized.

The Office in a counter argument suggests that the injection step of the '812 reference provides a "full cavity of melted resin". This is not correct. The '812 is not a thermal injection molding process. The '812 process injects a liquid pre-polymer (i.e. monomeric liquid) into the mold cavity, which is subsequently polymerized in place by exposure to U.V. radiation. Thus, since there is no molten resin, there is no embossing and there is no molten web. The '812 reference does not teach punching a hole in a molten web, but rather teaches ejection of a non-polymer (i.e. still monomer) from the mold chamber before the monomer is polymerized in place.

Further, one of ordinary skill in the art would not have combined the '812 reference with JP 02-182433 ('433) to achieve the present invention. The '812 reference is an injection polymerization process which is significantly different than the embossing technique of the '433 patent. In fact, if the method of '812 patent were combine with the '433 patent absurd results would be derived. The "punch" would not be able to force the semi-molten/semi-solid plastic of the web into any tubes without it solidifying and clogging the system. The system of the '433 patent could not be adapted to coat the web with a pre-polymer (i.e. liquid monomer) which would subsequently be solidified, and the "punch" would not be able to push the pre-polymer back out of the filling tube because the web of substrate material would be in the way. It is clear from the '812 reference that the substrate that the pre-polymer is molded to already has a center through-hole in it before it is placed into the mold.

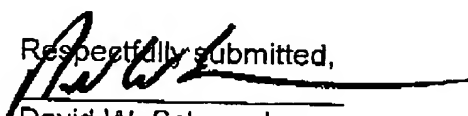
Thus the '433 and '812 references do not teach or suggest, individually or in combination the present invention as embodied in claims 1-29. Applicants respectfully request the withdrawal of such as rejection.

#### CONCLUSION

In view of the discussion above, applicant submits that the present application is now in condition for allowance and earnestly request the re-examination and timely notice of allowance thereof.

Should the Examiner have any comments or suggestions which would place the instant application in better condition for allowance, he is earnestly requested to contact the undersigned.

Respectfully submitted,



David W. Schumaker  
Reg. No 35,017

Date: October 11, 2006  
Energy Conversion Devices, Inc  
2956 Waterview  
Rochester Hills, MI 48309

Tel. (248) 299-6047  
Fax. (248) 844-2273  
e-mail: [schumaker@ovonic.com](mailto:schumaker@ovonic.com)